



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/721,806

11/25/2003

Thomas T. Hardt

200311361-1

6209

22879

7590

12/30/2004

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

EDWARDS, ANTHONY Q

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,806

Applicant(s)

HARDT ET AL.

Examiner

Anthony Q. Edwards

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-25-2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 3-8 are objected to because of the following informalities: claim 3-6 recite “front” and “rear” drawers, but there is insufficient antecedent basis for these limitations in the claims. Claims 7 and 8 depend, either directly or indirectly, from claim 6 and are objected to for at least the same reasons. Appropriate correction is required.

Likewise, claim 7 recites “said motherboard if directly” in line 1. This should probably read “said motherboard *is* directly.” Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 6-30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,459,589 to Manweiler et al. (“Manweiler” hereinafter). Referring to claim 1, Manweiler discloses a computer chassis (10) comprising a chassis base (54), see Figs. 1 and 4, a first drawer (36) removably engaged with said chassis base (54), an interface board (76) mounted to said first drawer (36) so as to couple to a first electrical component when the first electrical component is located in the first drawer (see Figs. 8, 9-12, and col. 4, lines 56-60), a second drawer (16) removably engaged with said chassis base (54), and a connector (68) mounted to said second drawer (16) so as to couple to a second electrical component (68) when the second

Art Unit: 2835

electrical component is located in the second drawer (see Fig. 5), wherein said connector (68) engages said interface board (76) so as to couple the first electrical component to the second electrical component when the first and second electrical components are located in the respective first and second drawers. See col. 4, lines 27-67 and col. 5, lines 1-8.

Referring to claim 2, Manweiler discloses a computer chassis, wherein said first and second drawers slidably engage said chassis base. See Figs. 5-8, which depict slidably engaging modules or drawers 16, 18, 34 and 36.

Referring to claim 6, Manweiler discloses a computer chassis, further comprising a motherboard (not numbered) inherently mounted to the rear (*sic*) drawer (16) and coupled to said connector (68). See Fig. 5, which shows vertically connected devices (66) that are mounted to a motherboard having connectors (not shown) to receive the devices.

Referring to claim 7, Fig. 5 of Manweiler shows a computer chassis, wherein said motherboard, i.e., mounted to the rear (*sic*) drawer (16), is directly interconnected to said connector (68).

Referring to claim 8, Manweiler discloses a computer chassis, wherein the second electrical component is directly connected to said motherboard when the second electrical component is located in the second drawer (16). See col. 4, lines 27-35.

Referring to claim 9, Manweiler discloses a computer chassis, wherein the first electrical component is directly connected to said interface board (76) when the first electrical component is located in the first drawer (36). See col. 4, lines 1-8.

Referring to claim 10, Manweiler discloses a computer, comprising a first electrical component (not numbered), see Fig. 8, a first drawer (36) operable to receive said first electronic

Art Unit: 2835

component, a midplane (76) board mounted to said first drawer and coupled to said first electrical component, a second electrical component (66), a second drawer (16) operable to receive said second electrical component (see Fig. 5), a connector (68) mounted to said second drawer (16) and coupled to said second electrical component (66), and a chassis base (54) supporting said first drawer (36) and said second drawer (16) such that said connector (68) is coupled to said midplane board (76). See Figs. 4, 10 and 12.

Referring to claim 11, Fig. 8 of Manweiler shows a computer, wherein the first electrical component is horizontally received in the first drawer (36).

Referring to claim 12, Figs. 3 and 9-12 of Manweiler show a computer, wherein the midplane board (76) is vertically mounted to the first drawer. See Figs. 3, 9 and 12.

Referring to claim 13, Fig. 5 of Manweiler shows a computer, wherein the second electrical component (66) is vertically received by the second drawer (16).

Referring to claim 14, Manweiler discloses a computer chassis, further comprising a motherboard (not shown) inherently mounted horizontally to the second drawer (16) and coupled to said connector (68). See Fig. 5, which shows vertically connected devices (66) that are mounted to a horizontally mounted motherboard having connectors (not shown) to receive the devices.

Referring to claim 15, Manweiler discloses a computer chassis, wherein the first component is a power supply module (34). See col. 4, lines 48-53.

Referring to claim 16, Manweiler discloses a computer chassis, wherein the second component is a processor module (66). See col. 4, lines 27-35.

Art Unit: 2835

Referring to claim 17, Manweiler discloses a computer chassis, further comprising a memory module mounted to said second drawer (16) and coupled to said motherboard. See Fig. 5 and col. 4, lines 28-30.

Referring to claim 18, Manweiler discloses a computer chassis, wherein the first electrical component is directly connected to the midplane (76). See col. 5, lines 1-8.

Referring to claim 19, Manweiler discloses a computer chassis, wherein the connector (68) is directly connected to the midplane board (76). See col. 5, lines 1-8.

Referring to claim 20, Manweiler discloses an electrical assembly comprising means for removably mounting an interface board (76) in a chassis (see Figs. 9-12 and the corresponding specification), means for coupling a first electrical component to one side of the interface board (see Fig. 8 and the corresponding specification), and means for coupling a second electrical component to the other side of the interface board (see Fig. 5 and the corresponding specification).

Referring to claim 21, Manweiler discloses an electrical assembly, wherein the first component is a power supply module (34). See col. 4, lines 48-53.

Referring to claim 22, Manweiler discloses an electrical assembly, wherein said second electrical component comprises a processor module (16) and a memory module. See Fig. 5 and col. 4, lines 28-30.

Referring to claim 23, Manweiler discloses an electrical assembly, wherein the interface board (76) is vertically mounted in the chassis. See Figs. 3, 9 and 12.

Art Unit: 2835

Referring to claim 24, Manweiler discloses an electrical assembly, wherein the means for coupling the electrical components to the interface board (76) slidably engage. See Figs. 9-12 and the corresponding specification).

Referring to claims 25-30, the method steps are necessitated by the device structure disclosed by Manweiler.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manweiler.

Referring to claim 3, Manweiler discloses the invention as claimed, except for further comprising a latch operable to secure said front (*sic*) drawer (36) to said chassis base.

Manweiler does teach providing a hand-operable latch (not numbered) at the front of the second drawer (16) for securing the same to the chassis base. It is well known in the art of computer chassis assembly systems to rearrange parts where needed (see *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Manweiler, such that the hand-operable latch provided at the front of the second drawer (16) is also provided on the front (*sic*) drawer (36) to secure the same to the chassis base, since this would provide securing means for both drawers.

Art Unit: 2835

Referring to claims 4 and 5, Manweiler discloses the invention as claimed, including the front (*sic*) and rear (*sic*) drawers comprising a power supply bay, a hard drive bay, a media module bay, expansion card bay, a processor bay, a cooling system bay, and a memory bay. See Figs. 5, 6 and 8, as well as col. 4, lines 27-55. Manweiler does not teach the bays specifically located as recited in the claims. It is well known, however, in the art of computer chassis assembly systems to rearrange parts where needed (see *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Manweiler, such that the power supply bay, the hard drive bay, and the media module bay are located in the front (*sic*) drawer, and such that the expansion card bay, the processor bay, the cooling system bay, and the memory bay are located in the rear (*sic*) drawer, since it has been held that rearranging parts of an invention involves only routine skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,785,133 to Barringer et al.; U.S. Patent Application Publication No. 2003/0206398 to Stamos et al.; U.S. Patent No. 6,046,912 to Leman; and U.S. Patent No. 4,918,572 to Tarver et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 23, 2004
aqe



ANATOLY VORTMAN
PRIMARY EXAMINER